THE INFORMATIVENESS ASSESSMENT OF RISK AND RISK MANAGEMENT DISCLOSURE IN CORPORATE REPORTING: AN EMPIRICAL ANALYSIS OF ITALIAN LARGE LISTED FIRMS

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Abstract

This paper aims to contribute to the ongoing debate about the effects of new Italian Legislative Decree No. 254 of December 30, 2016 on firms' disclosure behavior by investigating 1) the interaction relationship among Risk or Risk Management (RRM), Industry, Type of Risk, and Level of Specific Disclosure; 2) the variation of specific level of disclosing risk-related information across the industries and types of risk; 3) and the different behavior between risk and risk management disclosure in the aftermath of the regulation's issuance. The research is based on a sample of large undertakings and groups which are subjected to the Legislative Decree. Two phases of content analysis were executed to analyze the risk and risk management disclosure. The research questions were investigated by row effects log-linear model. Our result shows that there are interaction relationships among RRM, Type of Risk, Industry, and Level of Specific Disclosure. Companies provide risk-related information in different levels of specificity depending on whether the information is risk description or risk management, the firms are operating in manufacturing or non-manufacturing, and the type of risk which the firms disclosed in their reports. This research could be useful for policymakers who have to decide to what extent disclosure requirements should be detailed and, instead, what room should be left for management discretion, in respect to users' needs. This paper is an up-to-date assessment of the Italian firms' compliance to the Legislative Decree No. 254 of December 30, 2016.

1. INTRODUCTION AND RESEARCH QUESTIONS

Non-financial-information and its accountability have been proved to be as relevant as their financial counterparts to support the users' decision process (ICAEW, 2016; Lai et al., 2018), whereas boundaries between the former and the latter are progressively defined and redefined (Girella et al., 2018). Standards setters and regulators play an important role in encouraging firms to provide more useful and transparent information. In conjunction with the focus on the disclosure of relevant information, the recent European directive 2014/95/EU was issued on October 22, 2014, amending Directive 2013/34 EU and directing large companies to disclose specific non-financial information. This directive has been implemented in Italy by Legislative Decree No. 254 of December 30, 2016, in force since January 25, 2017. Specifically, in order to provide the transparency of non-financial information to the public, Large Public-Interest Undertakings are required (by the Decree) to prepare on an annual basis a non-financial statement that must contain necessary information to understand the company's risk profile and its impact on the company, society and the global economy, as well as the description of the company's risk management action.

A series of accounting scandals and the global financial crisis underscored the importance of risk communication. Correspondingly, the recent literature review about risk disclosure as the non-financial information (Elshandidy et al., 2018) highlights how significant efforts in previous studies have been devoted to quantity and quality in firms' risk reporting. Nevertheless, they do not find unanimous agreement on the potential benefits deriving from more or improved risk-reporting regulation (Elshandidy et al., 2018). Therefore, this paper aims to contribute to this ongoing debate about the effects of new regulation on firms' disclosure behaviors (Combes et al., 2006; Dobler, 2008; Lofstedt et al., 2011).

Specifically, this study extends the prior literature by addressing the informativeness of the Italian financial market disclosures about risk and risk management policies. In fact, in the aftermath of the above Decree, it is worth understanding to what extent companies disclose risk and risk management information under a company-specific perspective and if the firms have different behavior in disclosing this information across the industry and the type of risk. The Italian market provides an interesting field of research because of a series of law reforms that have been issued during the last decade, the last of which is related to the adoption of the aforementioned directive with the Legislative Decree No. 254. It could also be useful in the policymakers' perspective, by providing guidance on the various differences between risk-reporting approaches.

Based on this discussion, we formulate the following research questions:

1. Does the level of disclosing risk information differ across the industry and type of risk?

2. Is there different companies' behavior between risk and risk management disclosure?

To achieve these purposes, we examine if there are associations between RRM, Industry, Type of Risk, and Level of Specific Disclosure, and whether the association parameters of RRM, Industry, Type of Risk describe certain types of trends in Level of Specific Disclosure. In the end, we compare the association parameters of the models to understand the different behavior between risk and risk management disclosure.

Content analysis was used to analyze the risk and risk management disclosure. Further statistical tests have been carried out to support the robustness of our findings. Our result shows that there are interaction relationships among RRM, Type of Risk, Industry, and Level of Specific Disclosure. Companies provide risk-related information in different levels of specificity depending on whether the information is risk description or risk management; companies are manufacturing or non-manufacturing, and the type of risk that the firms disclosed in their report. Moreover, Compliance Risks are generally disclosed less specifically than Financial Risks but more specifically than others. The results also reveal that Risk Management information is more firm-specific than Risk Description.

The remainder of the paper proceeds as follows. In the next Section, we provide a brief review of the literature about risk disclosure and describe the theoretical framework we adopt to address the research questions. Section 3 describes the sample and statistical methodology used in the empirical analysis. In Section 4, we report and discuss the empirical results and address the three research questions. Finally, Section 5 provides some concluding remarks and implications of the study.

2. LITERATURE BACKGROUND AND THEORETICAL FRAMEWORK

Previous studies on risk disclosure and reporting have observed the phenomenon from several perspectives and according to different theoretical frameworks. Some authors (Dobler, 2008; Miihkinen, 2012; Greco, 2012; Kakanda et al., 2017) have dealt with risk disclosure with specific reference to the effect of new regulation on the management incentives for disclosure and they get to quite different conclusions across countries.

In fact, Dobler (2008) adopted and reviewed the discretionary disclosure and cheap talk models to analyze risk reporting incentives and their relation to regulation. Their findings support that regulation cannot overcome incentives in risk reporting at each level of analysis. The author posits that for both verified and unverified disclosure, more precise information held by the manager does not necessarily imply more

precise risk reporting. At the same time, managers appear to disagree with strictly mandatory risk reporting due to disclosure cost, including an increasing cost of capital.

On the other side, Miihkinen (2012) examines the impact of an introduced detailed national disclosure standard on the quality of firms' overall risk reviews under IFRS and used data from a sample of listed Finnish companies. After the release of the standard, the risk reviews of the firms became more extensive and provided more evenly distributed information across risk topics. Moreover, firms gave more detailed qualitative descriptions of the economic impact of the identified risk on future performance. Firms also provided more information on the actions they have taken and the programs they have planned to face risks even if they appear reluctant to provide monetary assessments of risk information.

With reference to Italian context, Greco (2012) considered the introduction of mandatory financial risk disclosure for Italian companies with the adoption of EU directive 51/2003 and the following legislative decree 32/2007. The author found that, even in presence of a significant increase in the quantity of risk-related sentences following the new regulation, the information attributes of the disclosure about risks remain unchanged throughout the period. The disclosed information is substantially qualitative, with few forward-looking narratives and quantitative forecasts about probability and estimated impact. The overall results support the hypothesis that regulation does not overcome incentives.

Kakanda et al. (2017), proposed a view on an African country, namely Nigeria, and they examined the disclosure intensity of risk management practices of listed financial service firms after the Corporate Governance Nigerian reform in the year 2011. The authors found that there is a significant disclosure of risk management practices of the sampled firms, especially in relation to their risk management committee structure and its responsibility, risk management policies, audit committee availability and function, and capital/market risks.

Other recent studies Elshandidy and Neri (2015) and Manes-Rossi et al. (2017) considered the influence of other variables on the risk disclosure behavior. Specifically, Elshandidy and Neri (2015) found that governance factors principally influence the decisions of the UK (Italian) firms over whether to exhibit risk information voluntarily (mandatorily) in their annual report narratives. Furthermore, strongly governed firms in the UK tend to provide more meaningful risk information to their investors than weakly governed firms. In Italy, however, they found that voluntary rather than mandatory risk disclosure, by strongly rather than weakly governed firms significantly improve market liquidity.

With reference to the relationship between strategies and risk, Manes Rossi et al. (2017) have explored Integrated Reporting (IR) and risk disclosure of Italian companies in order to demonstrate the

interconnection between business strategies and risk. Results show that companies seem to be more inclined to disclose operations risk, financial risk, and integrity risk, while the type of risk, less discussed, is related to empowerment. Organizations demonstrate high attention to environmental, health and safety as well as customer satisfaction issues, confirming a trend already underlined in studies devoted to sustainability disclosure in the same context (Bini et al., 2016).

However, under a more normative approach, other authors (Beretta & Bozzolan, 2004) proposed a framework for the analysis of risk communication and an index to measure the quality of risk disclosure and applied this framework to a sample of non-financial companies listed in the ordinary market on the Italian Stock Exchange. They specifically focused on four different but complementary dimensions: the content of information disclosed; the economic sign attributed to expected impacts; the type of measures used to quantify and qualify the expected impacts; the outlook orientation of risk communication and the managerial approach to the management of risks. The regression shows that the index of disclosure quantity is not influenced either by size or industry, and the authors conclude that the synthetic measure can be used to rank the quality of the disclosure of risks.

Moreover, a recent study (Elshandidy et al., 2018) provides a wide-ranging and up-to-date (1997 – 2016) review of the archival empirical risk-reporting literature. This review highlights some uncertainty and gaps within previous studies results. In fact, there are areas of significant divergence in the literature, such as: mandatory versus voluntary risk reporting, manual versus automated content analysis, within-country versus cross-country variations in risk reporting, and risk reporting in financial versus non-financial firms. The same study addresses at least two research directions to be worth investigating: first, a lack of clarity and consistency around the conceptualization of risk; and second, the potential costs and benefits of standard-setters' involvement.

Anyway, we can posit that extant literature does not find unanimous agreement on the potential benefits deriving from more or improved regulation. Therefore, more research is required; especially if we consider that national authorities are trying to regulate more and more the requirements for companies about risk and risk management disclosure and, to a wider extent, about non-financial information, in response to stakeholders' expectations.

Therefore, in order to fulfill our research purposes, we refer to the institutional theory and proprietary costs theory as they are able to provide greater insight in explaining and understanding the risk reporting. According to Abraham and Shrives (2014), there has been no current comprehensive theory for discretionary disclosure which explicitly explains the behavior of disclosure. Thus, a multi-theoretic approach is often applied. This paper refers to the institutional theory and proprietary costs theory to analyze our research questions. We believe that these two theories could provide a thorough background in

different aspects to explain the current issues in risk disclosure, as it could be limited or general, and a gap between risk identification and risk hedging action.

Mimetic disclosing behavior can be well explained by the institutional theory. Institutional theory looks at how organizations adapt to emerging forces from their institutional environment and particularly how organizations do so in order to maintain legitimacy. However, unlike new institutional theory (Meyer & Rowan, 1977), former institutional theory (Selznick, 1948) posits that organizations are mostly reactive in their adaptation; it provides a view of organizations through the natural perspective, wherein people in the organization have different goals but perceive the usefulness of working together within the organization to get results. According to the new institutional theory, organizations are rational, implying that they are formalized and goal-driven. In this case, when a new regulation comes into practices, companies would be expected to mimic others to an industry standard, instead of being expected to have their owned organizational practices designed to meet actual organizational needs.

Proprietary costs theory (Verrecchia, 1983; Wagenhofer, 1990) is based on the premise that companies limit voluntary disclosure of information to the financial market because of the existence of disclosure related costs (proprietary costs). In this instance, risk disclosure can be commercially and politically sensitive, whereas other parties can use the information to harm the firm. This finding may lead to the disclosure behaviour of the firms due to the potential cost of information.

As a matter of fact, prior studies have proved the variation in the amount of risk disclosure across firms and also evidence of deficient firm-specific information on risks (Roulstone, 1999; Abraham & Shrives, 2014; Hope et al., 2016). Hope et al. (2016) identified the disclosure as firm-specific if it contains the names of persons, locations, and organizations; quantifications of risk, such as values in percentages and money values in dollars; and chronological information, such as times and dates.

The risk-related information is also divergent between risk description and risk management policy. Roulstone (1999) proves that risk management practices were disclosed at a lower rate than primary exposures. He explained that the deficiencies in disclosures were due to the lack of details of specific hedges. As an illustration, he demonstrated that many firms did not list which derivatives were used and their positions to hedge the risk; instead, they generally stated that derivatives were used for hedging. Also, hedging a percentage of certain exposures was rarely reported. This gap creates confusion for the stakeholder to understand if the firm has well-defined and well-monitored the risks.

Additionally, the number of risk types being disclosed can illustrate the coverage level of risk that the firm is bearing. Indeed, Campbell et al. (2014) stated that firms bearing greater risk will disclose more risk factors, and the proportion of the information describing a risk will be

determined by the type of risk. Hence, they emphasize that managers tend to provide risk factor disclosures that meaningfully reflect the risks they face.

Moreover, even though many empirical studies have suggested that the level of disclosure is driven by the industry where firm is mainly operating in (Ahmed & Courtis, 1999; Belkaoui & Karpik, 1989; Cooke, 1992; Robb et al., 2001), other studies (Beretta & Bozzolan, 2004; Shevlin, 2004) found the independence between the industry and the quality of risk disclosure. This points out the disagreement in the debate regarding the enterprises' disclosure behaviour.

Under these theoretical backgrounds and the archive of previous studies, this paper carries together four variables, namely: 1) Level of Specific Disclosure, 2) RRM, 3) Industry and 4) Type of Risk, in order to investigate the aforementioned research questions.

3. METHODOLOGY

3.1. Sample

The research is based on a sample of large undertakings and groups which are subjected to the Legislative Decree No. 254 of December 30, 2016. We selected our sample from the AIDA (Bureau Van Dijk) database resulting in a 65 companies' sample and we collected financial and non-financial reports from those companies' websites. Then, we analyzed our research questions on a final sample of 53 companies with available data.

3.2. Method

Risk disclosure is qualitatively presented in companies' annual report as well as in the other separate reports such as Non-Financial Report and Sustainability Report. Content analysis, as a method of analyzing written, verbal or visual communication messages (Cole, 1988; Potter & Levine-Donnerstein, 1999) has been chosen to analyze the risk and risk management disclosure. Further statistical tests have been carried out to support the robustness and the reliability of our findings.

The instruments of risk disclosure in this research are developed as the elements of risk profile based on the previous study of Greco (2012) with the necessary adjustment following the more recent reform operated by Italian Law No. 254/2016. This study refers to this framework because it is offering an adequate submission of risk types with a high level of detail. To this end, we added environmental risk (energy resources, greenhouse gas emissions, and air pollution), social & employee risk (health and safety, gender equality, supranational and international organizations, and social dialogue), and corruption & bribery risk to the scheme. Accordingly, a set of 27 elements for 6 risk factors categories were constructed below to identify the focused information.

Table 2. Types of risks

Risk Factor	*Elements*
Strategic Risks	Macro-environment (political, social, economic)
	Industry
	Competitors
	Business portfolio
	Planning
	Product lifecycle
Reputation Risks	Corporate image
	Business ethics
Operations Risks	Customer satisfaction
	Product development
	Process management and Infrastructures
	HR management (turnover, employee satisfaction)
	Information systems
	Stock obsolescence and shrinkage
	Product and service failure
Compliance Risks	Health and safety
	Environment (energy resources, greenhouse gas emissions and air pollution)
	Industry regulation (antitrust, fair competition)
	Social and employee-related matters (gender equality, supranational and international organizations, social dialogue)
	Law 231/2001
	Human rights (violations and discrimination)
	Corruption & bribery
Reporting Risks	Financial accounting and reporting regulation
	Law 262/2005
Financial Risks	Credit
	Market (interest rate, exchange rate, market prices)
	Liquidity

This paper uses two phases of content analysis to study the depth of risk disclosure. Phase 1 implemented content analysis-based disclosure checklists which are designed to measure whether or not an item is disclosed (Roberts et al., 2008). The study involved reading the Risk and Risk Management section in Management report (commentary), Consolidated Non-financial report, Sustainability Reports, and Notes on Financial Risks of the sample companies and checking if an element in the risk factor was reported or not. Moreover, we also record whether the information is a risk description or a risk management policy description. Phase 2 used the dichotomous coding approach that is developed according to the scale suggested by Abraham and Shrives (2014) and is aimed to measure the depth of information. Every element taken from phase 1 of the analysis is categorized into 4 levels which are 0) No disclosure; 1) General disclosure; 2) Industry specific disclosure; 3) Company specific disclosure.

For the variable Industry, by the nature of the dataset, the sample is divided into two groups of industries. They are manufacturing and non-manufacturing.

The model selection log-linear analysis procedure to find out which variables are associated. Backward elimination method is processed to build models. After that, the analysis uses row effects log-linear models (Agresti, 2013) to investigate the research questions.

Log-linear analysis' assumptions were assessed prior to the analysis. The assumptions include the adequate sample size, and the expected frequencies should not be too small. The sample is meeting all requirements such that the expected cell frequencies of less than five should not compose more than 20% of the cells, and no cell should have an expected frequency of less than one (Tabachnick & Fidell, 2012). Moreover, all observations are independent of one another as suggested by Howell (2010).

4. RESEARCH QUESTION ANALYSIS

Backward elimination for the model selection helps to simplify the model for the sake of interpretation as well as finds out which categorical variables are associated. The selection is prescribed by Akaike's minimum AIC criterion (see Table 2).

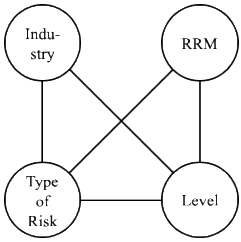
Table 2. Backward elimination model selection analysis summary

Step		*Effects*	*Df*	*Deviance*	*AIC*
0	Generating Class	Type[1]*RRM[2]*Lvl[3]*Ind[4]		1083.1	1583.4
	Deleted Effect	Type*RRM*Lvl*Ind	5	1090.2	1580.5
1	Generating Class	Type*RRM*Lvl, Type*RRM*Ind, Type*Lvl*Ind, RRM*Lvl*Ind		1090.2	1580.5
	Deleted Effect	Type*RRM*Ind	5	1090.5	1570.8
		RRM*Lvl*Ind	1	1090.7	1579.0
		Type*Lvl*Ind	5	1101.0	1581.3
		Type*RRM*Lvl	5	1222.4	1702.7
2	Generating Class	RRM*Lvl*Ind, Type*Lvl*Ind, Type*RRM*Lvl		1090.5	1570.8
	Deleted Effect	RRM*Lvl*Ind	1	1091.7	1570.0
		Type*Lvl*Ind	5	1101.2	1571.5
		Type*RRM*Lvl	5	1222.8	1693.1
3	Generating Class	Type*Lvl*Ind, Type*RRM*Lvl		1091.7	1570.0
	Deleted Effect	Type*Lvl*Ind	5	1102.2	1570.5
		Type*RRM*Lvl	5	1223.9	1692.2
		RRM*Ind	1	1091.8	1568.2
4	Generating Class	Type*Lvl*Ind, Type*RRM*Lvl		1091.8	1568.2
	Deleted Effect	Type*Lvl*Ind	5	1102.2	1568.5
		Type*RRM*Lvl	5	1223.9	1692.2

Note: [1]Type: Type of Risk, [2]RRM: Risk or Risk Management, [3]Lvl: Level of specific disclosure, [4]Ind: Industry

The results of the test reveal a final model includes the interactions between (Type of Risk, RRM, and Level of Specific Disclosure) and (Industry, Type of Risk, and Level of Specific Disclosure). This model allows for three-factor interactions. In other words, each pair of variables may be conditionally dependent, and the association between any pair may depend on the level of the third variable (Agresti, 1984). Thus, it means that Type of Risk, RRM, and Industry all affect the Level of Disclosure. Such relationships are depicted in Figure 1.

Figure 1. The interactions between industry, type of risk, RRM and level of specific disclosure



Since we are not interested in predicting the expecting frequency of observations, instead, the research is aimed to investigate if the trends in the Level of Specific Disclosure differ among, Industry, Type of Risk, and Risk or Risk Management. Thus, for the sake of simplicity in interpretation, we split the model into 2 sub-models as reported in 2 following subsections.

4.1. The difference in level of specific disclosure across industry and type of risk

Table 3 illustrates the association terms with the estimates extracted from the row effect model. The estimations of the model are useful to compare the specific level of disclosure among every category of Industry and Type of Risk. The higher the estimate is, the greater the tendency for the i^{th} combination of industry and type of risk to locate at the company-specific direction. In addition, the delta is also computed as the difference between the estimates of the i^{th} combination and the first combination (in each table) of industry and type of risk. The ratio, as the exponential of the delta, illustrated the odds of being classified in the i^{th} combination instead of the first combination in each table.

Table 3. Row effects log-linear analysis result for Model 1

Manufacturing	***Est.***	***Type Comparison***		***Non-manufacturing***	***Est.***	***Type Comparison***		***Industry Comparison***	
		Delta	***Ratio***			***Delta***	***Ratio***	***Delta***	***Ratio***
Strategic Risks	-0.686	0.000	1.000	Strategic Risks	-0.698	0.000	1.000	0.012	1.012
Reputation Risks	-1.030	-0.344	0.709	Reputation Risks	-0.652	0.046	1.047	-0.378	0.685
Reporting Risks	-2.319	-1.633	0.195	Reporting Risks	-2.248	-1.550	0.212	-0.071	0.931
Operation Risks	-0.792	-0.106	0.900	Operation Risks	-0.473	0.225	1.252	-0.319	0.727
Financial Risks	0.678	1.365	3.914	Financial Risks	0.958	1.656	5.236	-0.280	0.756
Compliance Risks	-0.198	0.488	1.629	Compliance Risks	-0.099	0.599	1.820	-0.099	0.905

The results reveal that in the manufacturing industry, Financial Risks have the highest estimate (0.678) indicating the most specific disclosure, and opposite result is shown for Reporting Risks with the lowest estimate (-2.319). This can be explained by the fact that Financial Risks are subjected to the disclosure scheme required by IFRS. On other hand, compliance risks, which are subjected to the new Decree, are still disclosed less specifically than financial risks, but they are more specific than all other types. In comparison with Strategic Risks, Compliance Risks have 1.629 times and Financial Risks have 3.914 times higher tendency to be reported in a company-specific way. Whereas Reporting Risks, Reputation Risks and Operation Risks are 0.195, 0.709 and 0.900 times less likely to be specific than Strategic Risks.

For non-manufacturing companies in this sample, a similar result with those from the manufacturing industry is revealed. Only Financial Risks have a positive estimate in this model, the other estimates are less than zero. The Financial Risks are much more specific than the other types with an estimate of 0.958, following by Compliance Risks (-0.099), Operation Risks (-0.473), Reputation Risks (-0.652), Strategic Risks (-0.698) and the Reporting Risks (-2.248). Reporting risks information from the non-manufacturing company is 0.212 times less likely to be specific than Strategic Risks, while all of the other types are probable to be more specific. Moreover, the tendency of Compliance Risks information being disclosed specifically by non-manufacturing companies is exp (=-0.099-0.958) = 0.348 times lower than Financial Risks.

The last two columns in the table demonstrate the comparison between two groups of the industry. The corresponding estimate comparison of manufacturing with non-manufacturing firms is approximately similar for Strategic Risks, Reporting Risks, and Compliance Risks. Whereas the information about Reputation Risks, Operation Risks and Financial Risks provided by manufacturing firms are less detailed than those provided by non-manufacturing. With regard to every feature, manufacturing firms tend to disclose information 0.685 times less specifically than non-manufacturing firms in Reputation Risks, 0.727 times and 0.756 times less specifically for the corresponding comparison in Operation Risks and Financial Risks.

4.2. The difference in the level of specific disclosure across RRM and type of risk

In disclosing risk description, Financial Risks have the highest estimate (0.337) denoting the best specific disclosure practice, followed by Compliance Risks (-0.266), Strategic Risks (-0.478), Operation Risks (-0.596), Reputation Risks (-0.774) and Reporting Risks as the least specific (-2.248) (see Table 4). The tendency of being classified in the company-specific disclosure of Financial Risks and Compliance Risks are 2.260 and 1.236 times respectively higher than Strategic Risks. In contrast, Operation Risks, Reputation Risks, and Reporting risks are 0.889, 0.744 and 0.170 times less likely to be disclosed in detail.

Table 4. Row effects log-linear analysis result for Model 2

Risk Description	*Est.*	*Type Comparison*		*Risk Management*	*Est.*	*Type Comparison*		*RRM Comparison*	
		Delta	*Ratio*			*Delta*	*Ratio*	*Delta*	*Ratio*
Strategic Risks	-0.478	0.000	1.000	Strategic Risks	-0.965	0.000	1.000	0.487	1.627
Reputation Risks	-0.774	-0.295	0.744	Reputation Risks	-0.364	0.601	1.824	-0.410	0.664
Reporting Risks	-2.248	-1.769	0.170	Reporting Risks	-1.840	-0.875	0.417	-0.408	0.665
Operation Risks	-0.596	-0.118	0.889	Operation Risks	-0.143	0.822	2.276	-0.454	0.635
Financial Risks	0.337	0.815	2.260	Financial Risks	2.374	3.339	28.184	-2.037	0.130
Compliance Risks	-0.266	0.212	1.236	Compliance Risks	0.450	1.415	4.115	-0.716	0.489

In disclosing risk management information, Financial Risks remain the best performance due to the highest estimate (2.374) while Reporting Risks is still the lowest position in the specific level with an estimate of -1.840. In comparison, Financial Risks get an extremely high estimate, denoted 28.184 times higher in the tendency to be more specific than Strategic risks. Furthermore, Compliance Risks also have a positive estimate of 0.450 indicating that the odds of being classified Company-specific instead Non-disclosure are 4.115 times higher than Strategic Risks.

In general, risk management disclosure has higher estimates than risk description disclosure for all types of risk except Strategic Risks. This points out the gap of specific level between risk management and risk description information. For instance, the largest gap in financial risks, 0.130 times difference, indicates that the odds of being disclosed specifically instead of generally are 1/0.130=7.665 times higher for Risk management information than for risk description information.

5. FINDINGS AND CONCLUDING REMARKS

Our results show that the specific level of the information differs depending on whether the information is risk description or risk management, where the firms are operating in manufacturing or non-manufacturing, and the type of risk which the firms disclosed in their reports. This finding is supplementing the discussion on the specific level of enterprise risk information from Abraham & Shrives (2014); Hope, et al. (2016), and Roulstone (1999). While they suggest that company managers prefer providing disclosures that are generic rather than substantive, we argue that the level of specific disclosure is deviating from general to firm-specific across industries, types of risks, risk description or risk management information.

For most of the cases in the combination among 4 variables, it shows that Compliance Risks, which bring the sustainability information

into focus, are less likely to be disclosed in a specific manner than Financial Risks but more likely to be more specific than other types of risks. This outcome is quite justifiable in the circumstances. In fact, information about Compliance Risks is subjected to the new regulation, whose requirements appear to be less standardized than those from IFRS scheme for the Financial Risks. However, since firms are realizing that these pieces of information on sustainability are relevant for their value creation process (Bini et al., 2016); firms are paying more attention to disclose those sustainability risks than the remaining ones.

Notwithstanding, for most of the cases, Compliance Risks have a negative coefficient denoting a greater tendency to be oriented toward a more general direction. Institutional theory can well explain this fact. Since the organizations adapt to the new Decree as the emerging forces from their institutional environment and particularly organizations do follow their peers in order to maintain legitimacy. Besides, a large proportion of general disclosure in compliance risk was recorded. By proprietary costs theory, companies limit their disclosure of risk-related information to the market to reduce the information costs. This is in the same line with the findings of Abraham & Shrives (2014); Hope, et al. (2016) and Roulstone (1999).

The divergence in the level of specific disclosure between risk description and risk management policy is also confirmed. The results reveal that risk management information is likely to be more firm-specific than risk description (except the Strategic Risks). Hence, companies tend to show to their stakeholder that they are proactive in hedging the uncertainties. This appears to be consistent with the findings of Lai et al. (2018) about how companies engage the dialogue with their stakeholders especially through a narrative mode of cognition. In spite of that, we could not ignore the importance of risk description because it provides the background for understanding how large the risks and its exposure are as well as its impact to the business, environment, and society. For this reason, we suggest that a balance company-specific disclosure is the best practice for risk communication.

To this extent, we propose two possible solutions to shorten these gaps. Time will be the first solution since the regulation on non-financial information is quite new and firms need time to understand and find their best practice to comply with the regulations as well as maintain their performance since these disclosures are costly. Second, an adequate scheme and typology should be provided by policymakers in order to track and maintain the synchronization of the disclosure of non-financial information in general and risk-related information in particular.

To sum up, the empirical results reveal that there are interaction relationships among RRM, Type of Risk, Industry, and Level of Specific Disclosure. In general, management tends to disclose risk and risk management information in different levels of specific information according to the type of risks and industry. In the aftermath of the

issuance of the Italian new regulation, compliance risk is still not as specific as financial risks, yet more specific than others. In this sense, this study confirms some previous studies' results (Greco, 2012). Anyway, the findings of this paper can contribute to the debate about the necessity of regulating non-financial disclosure and integrate prior research in terms of incentive to management to disclose differently about risk and risk management respectively. Moreover, this study shows how this different behavior is not consistent across the observed variables.

Finally, this research could be useful for policymakers who have to decide to what extent disclosure requirements should be detailed and, instead, what room should be left for management discretion, in respect to users' needs.

Limitations of this study lie mainly in the short time passed by after the new regulation issuance. Therefore, further research should be addressed in the next years to better assess which is the impact of new disclosure requirements on companies' behavior. Further research should be also addressed to run a cross-country comparison, especially for European countries, given that the new regulation is the result of a European Directive.

References

1. Abraham, S., & Shrives, P. J. (2014). Improving the relevance of risk factor disclosure in corporate annual reports. *The British Accounting Review, 46(1),* 91-107. https://doi.org/10.1016/j.bar.2013.10.002
2. Agresti, A. (1984). *Analysis of ordinal categorical data.* New York, USA: John Wiley & Sons, Inc.
3. Agresti, A. (2013). *Categorical data analysis* (3rd ed.). Florida, USA: John Wiley & Sons, Inc. Retrieved from: https://www.wiley.com/en-us/Categorical+Data+Analysis%2C+3rd+Edition-p-9780470463635
4. Ahmed, K., & Courtis, J. K. (1999). Association between corporate characteristics and disclosure levels in annual reports: A meta-analysis. *British Accounting Review, 31(1),* 35-61. https://doi.org/10.1006/bare. 1998.0082
5. Belkaoui, A., & Karpik, P. G. (1989). Determinants of the corporate decision to disclose social information. *Accounting, Auditing and Accountability Journal, 2(1),* 36-51. https://doi.org/10.1108/09513578910132240
6. Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *The International Journal of Accounting, 39(3),* 265-288. https://doi.org/10.1016/j.intacc.2004.06.006
7. Bini, L., Bellucci, M., & Giunta, F. (2016). Put your money where your mouth is: The difference between real commitment to sustainability and mere rhetoric. *Financial reporting, 2,* 5-31. https://doi.org/10.3280/FR2016-002001
8. Campbell, J. L., Chen, H., Dhaliwal, D. S., Lu, H. M., & Steele, L. B. (2014). The information content of mandatory risk factor disclosures in corporate filings. *Review of Accounting Studies, 19(1),* 396-455. https://doi.org/10.1007/s11142-013-9258-3
9. Cole, F. (1988). Content analysis: Process and application. *Clinical Nurse Specialist, 2(1),* 53-57. https://doi.org/10.1097/00002800-198800210-00025

10. Combes, E. T., Henneron, S., & Touron, P. (2006). Risk regulations and financial disclosure: An investigation based on corporate communication in French traded companies. *Corporate Communications: An International Journal, 11(3),* 303-326. https://doi.org/10.1108/13563280610680876
11. Cooke, T. E. (1992). The impact of size, stock market listing and industry type on disclosure in the annual report of Japanese listed corporations. *Accounting and Business Research, 22(87),* 229-237. https://doi.org/10.1080/00014788. 1992.9729440
12. Dobler, M. (2008). Incentives for risk reporting: A discretionary disclosure and cheap talk approach. *The International Journal of Accounting, 43(2),* 184-206. https://doi.org/10.1016/j.intacc.2008.04.005
13. Elshandidy, T., & Neri, L. (2015). Corporate governance, risk disclosure practices, and market liquidity: Comparative evidence from the UK and Italy. *Corporate Governance: An International Review, 23(4),* 331-356. https://doi.org/10.1111/corg.12095
14. Elshandidy, T., Shrives, P. J., Bamber, M., & Abraham, S. (2018). Risk reporting: A review of the literature and implications for future research. *Journal of Accounting Literature, 40,* 54-82. https://doi.org/10.1016/j.acclit. 2017.12.001
15. Girella, L., Abela, M., & Ferrari, E. R. (2018). Conceptual shifts in accounting: Transplanting the notion of boundary from financial to non-financial reporting. *Financial Reporting, 1(1),* 133-175. Retrieved from: https://ideas.repec.org/ a/fan/frfrfr/vhtml10.3280-fr2018-001005.html
16. Greco, G. (2012). The management's reaction to new mandatory risk disclosure: A longitudinal study on Italian listed companies. *Corporate Communications: An International Journal, 17(2),* 113-137. https://doi.org/ 10.1108/13563281211220256
17. Hope, O.-K., Hu, D., & Lu, H. (2016). The benefits of specific risk-factor disclosures. *Review of Accounting Studies, 21(4),* 1005-1045. https://doi.org/ 10.1007/s11142-016-9371-1
18. Howell, D. C. (2010). *Statistical methods for psychology* (7th ed.). Belmont, CA: Wadsworth, Cengage Learning. Retrieved from: https://gtu.ge/Agro-Lib/Howle.pdf
19. ICAEW, (2016). *Materiality in assuring narrative reporting. The journey: Milestone 4.* Retrieved from https://www.icaew.com/-/media/corporate/ archive/files/technical/audit-and-assurance/assurance/milestones/milestone-4.ashx
20. Kakanda, M. M., Salim, B., & Chandren, S. (2017). Corporate governance reform and risk management disclosures: Evidence from Nigeria. *Business and Economic Horizons, 13(3),* 357-367. https://doi.org/10.15208/beh.2017.26
21. Lai, A., Melloni, G., & Stacchezzini, R. (2018). Integrated reporting and narrative accountability: The role of preparers. *Accounting, Auditing & Accountability Journal, 31(5),* 1381-1405. https://doi.org/10.1108/AAAJ-08-2016-2674
22. Lofstedt, R., Bouder, F., Wardman, J., & Chakraborty, S. (2011). The changing nature of communication and regulation of risk in Europe. *Journal of Risk Research, 14(4),* 409-429. https://doi.org/10.1080/13669877. 2011.557479
23. Manes-Rossi, F., Nicolò, G., & Levy Orelli, R. (2017). Reshaping risk disclosure through integrated reporting: Evidence from Italian early adopters. *International Journal of Business and Management, 12(10),* 11-23. https://doi.org/10.5539/ijbm.v12n10p11
24. Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83(2),* 340-363. https://doi.org/10.1086/226550
25. Miihkinen, A. (2012). What drives quality of firm risk disclosure? The impact of a national disclosure standard and reporting incentives under IFRS. *The International Journal of Accounting, 47(4),* 437-468. https://doi.org/10.1016/j. intacc.2012.10.005

26. Potter, W., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research, 27(3),* 258-284. https://doi.org/10.1080/00909889909365539
27. Robb, S. W., Single, L. E., & Zarzeski, M. T. (2001). Nonfinancial disclosures across Anglo-American countries. *Journal of International Accounting, Auditing and Taxation, 10(1),* 71-83. https://doi.org/10.1016/S1061-9518(01)0 0036-2
28. Roberts, C., Weetman, P., & Gordon, P. (2008). *International financial reporting: A comparative approach* (3rd ed.). Essex, England: Pearson Education Limited. Retrieved from: https://books.mec.biz/tmp/books/ XKFQ41HIIS5E4HZNX3HL.pdf
29. Roulstone, D. T. (1999). Effect of SEC financial reporting release No. 48 on derivative and market risk disclosures. *Accounting Horizons, 13(4),* 343-363. https://doi.org/10.2308/acch.1999.13.4.343
30. Selznick, P. (1948). Foundations of the theory of organization. *American Sociological Review, 13(1),* 22-35. https://doi.org/10.2307/2086752
31. Shevlin, T. (2004). Discussion of "A framework for the analysis of firm risk communication". *The International Journal of Accounting, 39(3),* 297-302. https://doi.org/10.1016/j.intacc.2004.06.008
32. Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston, USA: Pearson. Retrieved from: https://www.pearson.com/ us/higher-education/program/Tabachnick-Using-Multivariate-Statistics-6th-Edition/PGM332849.html
33. Verrecchia, R. E. (1983). Discretionary disclosure. *Journal of Accounting and Economics, 5,* 179-194. https://doi.org/10.1016/0165-4101(83)90011-3
34. Wagenhofer, A. (1990). Voluntary disclosure with a strategic opponent. *Journal of Accounting and Economics, 12(4),* 341-363. https://doi.org/10.1016/ 0165-4101(90)90020-5